Vacancy Announcement Number: EPA-Exec-2017-0004 Senior Executive Service Candidate Development Program U.S. Environmental Protection Agency October 31, 2016

Application of ...

## Qualification Highlights

- Served in multiple leadership positions in the Federal government for 11 years.
- GS15 Branch Chief; <u>Details</u>: Acting Division Director (SES position), Associate Director of Science.
- Directed multi-million dollar projects; Testifying expert for Department of Justice.
- Speaker at international conferences, public meetings, and training workshops.
- Authored over 100 articles in peer reviewed journals and text books.
- Previous owner of consulting business serving Government and NGO sectors.

#### MANAGEMENT POSITIONS

# Branch Chief, GS-15, December 2003-February 2014 Gulf Ecology Division, U.S. EPA, Gulf Breeze, FL.

- Front line supervisor for staff of 17 scientists and technicians.
- Planned and coordinated research; managed million dollar budgets.
- Human, financial and material resource management.
- Determined staffing, financial, and research priorities.
- Career development, redeployment, recruitment and hiring of staff.
- Established incentive programs and performance awards.
- Outreach to Program Offices, Regions, international science community.
- Regularly served as Acting Division Director (SES position).

# <u>Detail</u>: Associate Director of Science, GS-15, February 2013 to February 2014 Gulf Ecology Division, U.S. EPA, Gulf Breeze, FL.

- 1 year detail assignment as Division Science Advisor.
- Analyzed Agency science requirements; represented program goals for EPA.
- Formulated and articulated long-term research direction and strategy.
- Integrated research across disciplines and Branches.
- Chaired Research Management Council.
- Lead consensus-based re-visioning of Divisional R&D investments to better respond to Agency needs.
- Regularly served as Acting Division Director (SES position).

# <u>Detail:</u> Acting Division Director, GS-15, November 2009 - March 2010 (SES position). Gulf Ecology Division, U.S. EPA, Gulf Breeze, FL.

- Programmatic and organizational leadership of Division (56 FTE; \$5 mil).
- Determined short and long term research investments.
- Supervised Branch Chiefs and senior administrative staff.
- Established management control systems to achieve mission results.
- Allocated financial and manpower resources within budgetary limitations.
- Supported equal opportunity and affirmative actions.

## **EXECUTIVE CORE QUALIFICATIONS**

# LEADING CHANGE

The National Contingency Plan (NCP) is the key governing document for all oil spills in the United States. The Regulations regarding oil dispersants within the NCP had not been revised since 1994 and did not reflect current science and technology. During the Gulf oil spill the EPA Administrator asked for less toxic dispersants, but there were no benchmarks in the NCP for judging chemical safety nor effective monitoring procedures in the old regulations.

Over a 6 year period beginning in May 2010, I lead a team of scientists and regulators from across EPA to revise the NCP and improve how our Nation regulates oil spill agents:

- Set the vision for our team and developed a strategic plan to recraft the dispersant regulations as a proposed new Rule that met EPA deadlines, replaced outdated technology, and incorporated innovative approaches for judging product safety.
- Balanced OMB concerns of burdening industry with costly new requirements with stakeholder needs for expanded environmental testing of product efficacy and safety.
- Incorporated state of science and technology in the new regulations.
- Created a novel and flexible approach for delisting the most toxic products to address public concerns.
- Developed innovative environmental monitoring approaches to allow rapid assessment of adverse effects from chemical use during an oil spill.
- Capitalized on opportunity to evaluate proposed new test methods by procuring \$350,000 in new funding and leading the product toxicity testing program.
- Lead re-visioning of the proposed Rule by strategically adapting to evolving stakeholder needs during review and comment periods.

I lead our team in delivering the proposed Rule on time, and provided technical leadership during Final Agency Review, OMB interagency review, and the public comment period. Recognition and outcomes of leading this landmark change in chemical regulation:

- EPA Technical Assistance Award for my leadership and recognition by the Assistant Administrator of OLEM for the "difficulty in working with a broad range of stakeholders including environmental advocacy groups, the public, responders, Government and industry stakeholders".
- The toxicity benchmark-based monitoring approaches I developed are now part of published U.S. National Response Team guidance for oil dispersant monitoring that provides safer use of dispersants and other spill control agents in the environment.
- The final Rule will be signed by the Administrator in 2017, and the Agency noted that
  because of the significant improvements in the Rule: "the emergency planning and
  response community will be better equipped with the proper information to make
  informed response decisions to protect human health and the environment."

#### LEADING PEOPLE

I joined the EPA as a Branch Chief in the Gulf Ecology Division of the Office of Research and Development (ORD) in December 2003. I took over a Branch of 17 staff that had experienced frequent management turnover, inconsistent policies and expectations, perceived favoritism, and lacked teamwork. An additional challenge was the skill sets and the organization focus of the Branch were not aligned with Agency science priorities.

I transformed the branch into a high performing team that uses state of the science practices to address Agency problems:

- Developed a strategic hiring plan to transform the Branch from primarily empiricalbased scientists to a molecular and modeling focus of greater relevance to EPA.
- Leveraged retirements and relocations to recruit a diverse group of seven new hires, and procured funding for state of science equipment and improved laboratory facilities.
- Set a high standard of excellence and work ethic through my personal conduct.
- Expanded Branch scientific expertise by procuring funding for training in new computational sciences, facilitating networking, supporting science conferences, providing Detail assignment opportunities, and instituting a mentoring and cross training program.
- Established Agency relevancy by communicating EPA research needs, and including team-based goals and Agency science priorities into performance planning and individual development plans.
- Reduced conflicts and built teamwork by reassigning staff duties, reorganizing teams around Agency research themes, developing new Team leaders, empowering staff, and establishing a goal-oriented inclusive work environment.

Organizational vision, mission and goals were advanced by:

- Diversity of new hires and resulting gender balance provided new perspectives and demeanor in the Branch that contributed to positive attitudes and reduced conflicts.
- Improved supervisor-employee communications and interactions, and greater employee job satisfaction and accountability as evidenced by feedback from internal listening sessions.
- Increased respect and teamwork, and substantially reduced interpersonal conflicts as evidenced by team-based acceleration of complex research projects.
- Elevated performance and productivity; science publications increased by 30%.
- Greater Agency relevancy and impact as evidenced by staff participation and leadership in Agency workgroups, and doubling of staff recognition awards from EPA Offices and Regions.
- Strategic hires now serve in leadership roles as Team Leader, Acting Chief and Acting Director.

#### RESULTS DRIVEN

The Deepwater Horizon (DWH) spill began on April 29, 2010 and was the largest oil spill in U.S. history, resulting in the release of over 200 million gallons of crude oil from a mile deep in the ocean. The spill lasted three months, and challenged EPA's ability to regulate and monitor the nearly 2 million gallons of chemical dispersants used to combat the spill.

I served as the Agency expert on chemical dispersants and my actions ensured that the best science was used in decision making:

- Advised Headquarters and being continuously on call including nights and weekends to respond to Agency issues regarding the environmental impacts and tradeoffs of using chemical dispersants.
- Represented EPA in high level multi-stakeholder workgroups evaluating BP requests to use dispersants.
- Drafted and improved the accuracy of public communications, responses to Congressional inquiries, and memoranda from EPA to BP.
- Prepared the Assistant Administrator of EPA for Congressional testimony.
- Provided time critical review of BP and cross-agency documents that became part of the Agency's mandated spill monitoring program during the National crisis.
- Lead the innovative design and oversight of a \$0.5 mil testing program used by the EPA Administrator to make National decisions on dispersant use during the spill.
- Provided expert review and advice to the U.S. Department of Justice, and testified as the U.S. Government's factual witness on dispersant toxicology.

My leadership resulted in more informed dispersant approvals, use and monitoring during a continually evolving National crisis. My expert advice improved the accuracy and timeliness of technical communications with BP, Congress, and the public. My recommendations have now been incorporated in multi-agency National Response Team Guidance on Dispersant Operations.

I received multiple awards as recognition for my leadership during the oil spill:

- Bronze Medal for serving on EPA's DWH Science Team.
- Two awards from the Assistant Administrator of ORD for dedication and service.
- Gold Medal for supporting litigation resulting in the \$20 Billion settlement with BP.

## **BUSINESS ACUMEN**

During the 12 year period ending January 2014, I served as a member of the management team of the Gulf Ecology Division (GED) of EPA's Office of Research and Development (ORD). I worked to develop and deliver tools that improved the scientific basis of chemical regulation.

After major hurricanes that caused the loss of scientific experiments and samples, I directed the financial, human capital, and technology resources to secure and update

an antiquated 12,000 square foot testing facility. As Acting Director (SES position), I managed an operating budget of \$5 million and an EPA and contractor staff of 120, and continued to transform the laboratory into a state of the science facility:

- Developed a vision and lead the transformation of the laboratory to create resilient and flexible test systems.
- Developed and implemented a business plan and procured and administered funding for materials, supplies and specialized equipment.
- Identified and secured an extramural funding program that has provided over \$1.4
  million in contractor support to the testing facility.
- Leveraged Divisional resources to procure a new computer system that allowed remote test system control during hurricane evacuations, and an updated generator system to provide reliable power during storm outages.

My leadership and innovation in managing financial and technological resources resulted in a state of the science testing facility that is now able to remain operational during major storm events in the Gulf of Mexico. The facility is now used for experiments supporting Agency regulation in water quality, coral reef systems and endangered species.

During my 10 years as a Branch Chief, I managed the human capital and information technology of 17 EPA employees that had computer tools and expertise in disciplines and that were no longer positioned to address Agency science problems:

- Leveraged retirements to recruit seven new hires, and rebuilt the Branch as a team with a mix of laboratory, field, and computational modeling skills.
- Conducted annual performance planning and assessments and career development, and recognized deserving employees with on the spot, incentive, and time-off awards.
- Addressed personnel issues by working with HR experts and using EAP referrals, including managing and redirecting one formerly suicidal employee to become a productive team member by utilizing her computer skills to become the database manager.
- Recruited and hired a statistical modeling expert and directed funding to an IT contractor to develop an innovative internet application (Web-ICE) to predict toxicity to endangered species.
- Continuously improved Web-ICE based on feedback from EPA Offices and Regions, and led research on the technical basis of the tool resulting in 12 peer reviewed publications.

The results of my human capital and information technology management has been continuously demonstrated by our Agency contributions, and numerous ORD, Laboratory, and Division awards for teamwork, diversity, leadership, and publications. Our internet tool, Web-ICE, met major Agency milestones by being reviewed by the EPA Science Advisory Panel, and being recommended by the National Research Council. Because of my leadership, Web-ICE is now a critical tool in Agency endangered species evaluations, and is used by the international science community to reduce uncertainty in ecological assessments.

## BUILDING COALITIONS

In 2010, I was asked to be the U.S. State Department representative for a new project at the former Soviet chemical weapons laboratory in Tajikistan. The project engaged the scientists in peaceful environmental research on pesticide burials near local villages. My first visit in 2011 revealed obsolete analytical facilities and a project team with experience in chemical weapons development, but no training in environmental science.

My leadership actions developed a sustainable environmental science program in Tajikistan:

- Negotiated the project scope of work to focus on tangible objectives, and lead the training of the team of 10 Tajik chemists in principles of environmental research.
- Partnered with a Russian scientist to help with language and cultural barriers, and two EPA chemists to assist with training and data analysis.
- Procured additional funding for Tajik team salaries, state of science analytical equipment, and training travel for two Tajik graduate students at our chemistry laboratory in the U.S.
- Built trusting relationships by mentoring the project team during three additional site visits, and providing guidance on quality assurance, environmental sampling and analyses.
- Diplomatically and strategically transitioned new local project management following the untimely death of the Tajik Principal Investigator.

I developed and lead an international project team from a diversity of national cultures that resulted in societal, environmental, scientific, and cross-cultural benefits during the five year project:

- Former weapons scientists are now engaged in environmental science rather than developing chemical weapons of mass destruction.
- Landmark research: largest investigation of pesticide contamination in history of Tajikistan.
- Communicated low food risks and allayed local village concerns of pesticide poisonings.
- Established a sustainable peaceful research program with state of science instrumentation and well trained technicians and students, and new Tajik project management.
- Contaminated sites are now being cleaned up under the direction of the United Nations Environment Programme.
- I was invited to return to Tajikistan for an international workshop on contamination in former Soviet republics.

## OTHER PROFESSIONAL POSITIONS HELD

- Board of Directors of SETAC (3000 member science society) (2013-2016).
- Graduate Faculty Appointments: University of South Alabama (2015-2016);
   University of Alaska (2002).
- Editorial Board of international journal: Aquat. Tox. (2003-2016).
- Associate Editor of international journal: Environ. Tox. Chem. (2000-2004).
- President and Board member, SETAC Regional Chapter (1999-2003).
- Owner and Principal Scientist. P.E.A.K. Research, Longmont, CO (1999-2003).

## **EPA HONORS AWARDS:**

- Gold Medal for Deepwater Horizon litigation support (2016).
- Bronze Medal for sustainable chemistry program teamwork (2015).
- Bronze Medal for Puerto Rico community support (2014).
- ORD Impact Award for development of EPA toxicity tool (2013)
- Bronze Medal for Deepwater Horizon science support (2011)
- Technical Assistance Awards for Program Office/Region support (2009, 2013).
- Bronze medal for litigation support to EPA Region 5 (2007).

# **EDUCATION AND SPECIALIZED TRAINING**

- EPA Facilitative Leadership; Catalytic Management; Excellence in Supervision; Leveraging Diversity; Interpersonal Communication (2004-2006).
- PhD, Pharmacology/Toxicology (1986); MS, Fisheries Science (1982); BS, Fisheries Science (1980).

# ORAL AND WRITTEN COMMUNICATION

- Published 116 peer reviewed international journal articles and book chapters.
- Authored EPA national guidance on risk assessment and oil spills.
- Presented over 70 seminars, platform presentations, and international invited key note addresses.
- 8 EPA Scientific and Technical Achievement Awards for exemplary research publications.